# State of Hawaii DEPARTMENT OF LAND AND NATURAL RESOURCES Division of Aquatic Resources Honolulu, Hawaii 96813

August 12, 2011

Board of Land and Natural Resources Honolulu, Hawaii

Request for Authorization and Approval to Issue a Papahānaumokuākea Marine National

Monument Native Hawaiian Practices Permit to Shauna Kehaunani Tom, Friends of
Papahānaumokuākea, for Access to State Waters to use Traditional Ecological Knowledge to

Examine Intertidal Ecosystems

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Marine National Monument Native Hawaiian practices permit to Shauna Kehaunani Tom, Vice President, Friends of Papahānaumokuākea, pursuant to § 187A-6, Hawaii Revised Statutes (HRS), chapter13-60.5, Hawaii Administrative Rules (HAR), and all other applicable laws and regulations.

The Native Hawaiian practices permit, as described below, would allow entry and activities to occur in Papahānaumokuākea Marine National Monument (Monument), including the NWHI State Marine Refuge and the waters (0-3 nautical miles) surrounding the following sites:

- Nihoa Island
- Necker Island (Mokumanamana)
- French Frigate Shoals
- Gardner Pinnacles

The activities covered under this permit would occur between September 1, 2011 and November 30, 2011.

The proposed activities are largely a renewal of work previously permitted and conducted in the Monument.

#### INTENDED ACTIVITIES

The Applicant proposes to examine the basic ecology of 'opihi populations and intertidal ecosystems within the NWHI by making keen observations of the environment and interactions by understanding connections with atmospheric and seasonal cycles from a Native Hawaiian perspective.

Through a collaboration with various partners (incluing Na Mamo o Muole'a, the Nature Conservancy, HIMB, Friends of Papahānaumokuākea, and NOAA) a standard 'opihi monitoring

protocol which is inclusive of Hawaiian methods of monitoring, has been developed and would be used. This project was developed and would be carried out in close cooperation with Dr. Rob Toonen, the Applicant requesting a research permit which would coincide and integrate with this Native Hawaiian practices proposal.

To accomplish this activity the Applicant would utilize Native Hawaiian protocol and practice, based on traditional knowledge, to assess the environment, which would be integrated with the scientific ecological data. Native Hawaiian observations include using all senses to note activities in the sky, land, and ocean. Observations may focus on aspects such as cloud formation, visibility, wind direction, the moon phase, waves and currents, bird activity, and animal behaviors, as well as noting which plants are flowering, seeding, or fruiting. Documenting activities and recording connections between these events would highlight relationships and possible dependencies between reoccurring events and activities.

No specimens would be collected under this permit application, however specimens would be collected under the research permit application submitted by Dr. Rob Toonen at HIMB and would be shared with cultural researcher / practitioners for studies on spawning, reproduction and correlations with weather (especially lunar cycles) in the field.

This activity would not only add to the current knowledge of the marine environment in the NWHI, it would help to gain a better understanding of the resources by looking at the resources through a Native Hawaiian cultural lens ensuring a holistic approach to interaction and care. It would also help the Monument by continuing to re-establish Native Hawaiian ancestral consciousnes and awareness with regard to the health and condition of the marine resources. The activities proposed by the Applicant directly support the Monument Management Plan's priority management needs 3.1 – Understanding and Interpreting the NWHI (through action plan 3.1.2 – Native Hawaiian Culture and History), which includes activities to conduct, support, and facilitate Native Hawaiian cultural access and research in the NWHI.

The activities described above may require the following regulated activities to occur in State waters:

Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

#### **REVIEW PROCESS**

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since June 10th, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

Comments received from the scientific community are summarized as follows:

Scientific reviews support the acceptance of this application. The following questions were raised:

1. Conducting belt transects for opihi data and in the intertidal, collecting and preserving samples for lab analysis, and collecting quantitative data on reef fish populations and recruitment are not Native Hawaiian Practices. How does this fit with a Native Hawaiian Practices permit?

Two applications were submitted, the idea is an attempt to bridge both western and Hawaiian sciences.

The Applicant states that though the methods are very western science oriented, they enable the Applicant, as a Native Hawaiian, to understand and know her environment and answer the bigger question "how do we know our environment in such a way that when we interact with it, it's in a healthy and sustainable way?" These methods contribute to a bigger picture that, as a native Hawaiian, she is trying to understand so when people interact with their environment (and ultimately make decisions that affect the environment) it's healthy and sustainable for all.

2. The Applicant makes a number of statements about the highly appropriate level of training and knowledge possessed by all personnel being selected for this expedition, but in fact no one except the applicant has been identified by name and personnel are yet to be determined.

The Applicant explains that selection criteria for consideration would include: (1) selected communities would each be asked to nominate two representatives to fill available berths. (2) field experience and history working in the intertidal zone (3) extensive knowledge of Hawaii's intertidal areas (fish, limu (algae), invertebrates, etc.) and (4) some knowledge of Native Hawaiian protocol. Selection would be made by a committee who has background in both western and traditional sciences.

### Comments received from the Native Hawaiian community are summarized as follows:

Cultural reviews support the acceptance of this application.

#### Comments received from the public are summarized as follows:

No comments were received from the public on this application.

#### Additional reviews and permit history:

Are there other relevant/necessary permits or environmental reviews that have or will be issued with regard to this project? (e.g. MMPA, ESA, EA)

Yes No I

If so, please list or explain:

- The proposed activities are in compliance with the National Environmental Policy Act.
- The proposed activities are in concurrence with ESA Section 7.
- The Department has made an exemption determination for this permit in accordance chapter 343, HRS, and Chapter 11-200, HAR. See Attachment ("DECLARATION OF

EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200 HAR, FOR PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT NATIVE HAWAIIAN PRACTICES PERMIT TO SHAUNA KEHAUNANI TOM, FRIENDS OF PAPAHĀNAUMOKUĀKEA, FOR ACCESS TO STATE WATERS TO USE TRADITIONAL ECOLOGICAL KNOWLEDGE TO EXAMINE INTERTIDAL ECOSYSTEMS UNDER PERMIT PMNM-2011-040") Has the Applicant been granted a permit from the State in the past? Yes X No If so, please summarize past permits: However, the current proposal is a continuation of worked carried under permits PMNM-2009-046 and PMNM-2010-040, issued to Mahina Duarte and Andy Collins respectively. Have there been any a) violations: No b) Late/incomplete post-activity reports: Yes No Are there any other relevant concerns from previous permits? X Yes No

#### **STAFF OPINION**

DAR staff is of the opinion that Applicants have properly demonstrated valid justifications for her application and should be allowed to enter the NWHI State waters and to conduct the activities therein as specified in the application with certain special instructions and conditions, which are in addition to the Papahānaumokuākea Marine National Monument Native Hawaiian Practices Permit General Conditions. All suggested special conditions have been vetted through the legal counsel of the Co-Trustee agencies (see Recommendation section).

#### MONUMENT MANAGEMENT BOARD OPINION

The MMB is of the opinion that the Applicants have met the findings of Presidential Proclamation 8031 and this activity may be conducted subject to completion of all compliance requirements. The MMB concurs with the special conditions recommended by DAR staff.

#### **RECOMMENDATION**

Based on the attached proposed declaration of exemption prepared by the department after consultation with and advice of those having jurisdiction and expertise for the proposed permit actions:

- 1. That the Board declare that the actions which are anticipated to be undertaken under this permit will have little or no significant effect on the environment and is therefore exempt from the preparation of an environmental assessment.
  - 2. Upon the finding and adoption of the department's analysis by the Board, that the Board

delegate and authorize the Chairperson to sign the declaration of exemption for purposes of recordkeeping requirements of chapter 343, HRS, and chapter 11-200, HAR.

- That the Board authorize and approve a Native Hawaiian practices permit to Shauna Kehaunani Tom, Friends of Papahānaumokuākea, with the following special conditions:
  - a. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.
  - b. To prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocol attached to this permit.
  - c. Refueling of tenders and all small vessels must be done at the support ships and outside the confines of lagoons or near-shore waters in the State Marine Refuge.
  - d. No fishing is allowed in State Waters except as authorized under State law for subsistence, traditional and customary practices by Native Hawaiians.

APPROVED FOR SUBMITTAL

William J. Aila, Jr.

Chairperson

#### Papahānaumokuākea Marine National Monument

Native Hawaiian Practices Permit Application

NOTE: This Permit Application (and associated Instructions) are to propose activities to be conducted in the Papahānaumokuākea Marine National Monument. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Papahānaumokuākea Marine National Monument (Monument).

#### ADDITIONAL IMPORTANT INFORMATION:

- Any or all of the information within this application may be posted to the Monument website informing the public on projects proposed to occur in the Monument.
- In addition to the permit application, the Applicant must either download the Monument Compliance Information Sheet from the Monument website OR request a hard copy from the Monument Permit Coordinator (contact information below). The Monument Compliance Information Sheet must be submitted to the Monument Permit Coordinator after initial application consultation.
- Issuance of a Monument permit is dependent upon the completion and review of the application and Compliance Information Sheet.

#### INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED

Send Permit Applications to:
Papahānaumokuākea Marine National Monument Permit Coordinator
6600 Kalaniana'ole Hwy. # 300
Honolulu, HI 96825
nwhipermit@noaa.gov
PHONE: (808) 397-2660 FAX: (808) 397-2662

SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT REQUIRED. FOR ADDITIONAL SUBMITTAL INSTRUCTIONS, SEE THE LAST PAGE.

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### Papahānaumokuākea Marine National Monument Permit Application Cover Sheet

This Permit Application Cover Sheet is intended to provide summary information and status to the public on permit applications for activities proposed to be conducted in the Papahānaumokuākea Marine National Monument. While a permit application has been received, it has not been fully reviewed nor approved by the Monument Management Board to date. The Monument permit process also ensures that all environmental reviews are conducted prior to the issuance of a Monument permit.

#### **Summary Information**

Applicant Name: Shauna Kehaunani Tom

Affiliation: N/A

Permit Category: Native Hawaiian Practices

Proposed Activity Dates: September – November 2011 Proposed Method of Entry (Vessel/Plane): Vessel

Proposed Locations: Nihoa Island Mokumanamana Island, French Frigate Shoals (La Perouse

Pinnacle), Gardner Pinnacles

Estimated number of individuals (including Applicant) to be covered under this permit:

Twelve individuals are to be covered under this permit

Estimated number of days in the Monument: 12 days

**Description of proposed activities:** (complete these sentences):

#### a.) The proposed activity would...

The proposed activity aims to examine the basic ecology of 'opihi populations and intertidal ecosystems within the NWHI by making keen observations of the environment and interactions by understanding connections with atmospheric and seasonal cycles from a Native Hawaiian perspective. Through a collaboration with Na Mamo o Muole'a, the Nature Conservancy, the Hawai'i Institute of Marine Biology, Friends of Papahānaumokuākea and the NOAA Papahānaumokuākea Marine National Monument; a standard 'opihi monitoring protocol which is inclusive of Hawaiian methods of monitoring, has been developed (and is continuously being refined) to monitor populations within select locales on Hawaii Island, Maui, Kaho'olawe and the NWHI. This would be the third year collecting data at locations within the NWHI. Consistent with proclamation 8031, these activities will strengthen cultural and spiritual connections to the Northwestern Hawaiian islands and foster the expansion and perpetuation of Native Hawaiian ecological knowledge. This knowledge may be critical as it is observed by local Hawaii residents that 'opihi stocks are generally diminishing in size and number in the main Hawaiian islands, therefore more data in this area may help to curb the decline. In addition, comprehensive surveys of the intertidal zone within the NWHI have never been conducted. The continuation of 'opihi data collection, and comprehensive intertidal surveys (including fishes,

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algae and invertebrates) using Native Hawaiian ecological knowledge coupled with western science will help to contribute to the overall health of Papahanaumokuakea.

b.) To accomplish this activity we would ....

To accomplish this activity we will utilize Native Hawaiian protocol and practice, based on traditional knowledge, to assess the environment, which will be integrated with the scientific ecological data. Native Hawaiian observations include using all senses to note activities in the sky, land, and ocean. Documenting activities and recording connections between these events will highlight relationships and possible dependencies between reoccurring events and activities.

- Sky observations include looking at cloud formations, noting wind direction/strength and what times it changes, visibility of the horizon, bird activity, other weather related observations such as rain or rainbows, the rising and setting of the moon and sun, the moon phase, and stars.
- Land observations include looking at any plants that are flowering, seeding or fruiting, new growth, animals reproducing, precipitation and soil moisture, bird arrival and departure and any other animal behaviors. Land observations from the main Hawaiian Islands during the expedition may also be useful to help remember activities in the NWHI during that time. For example, we notice hala fruiting here on the main islands and can relate that in the Northwestern Hawaiian Islands, this is the season when juvenile iwa are still in the nest.
- Ocean observations include noting the tide (high/low and time), waves and currents, identifying and looking at the behavior of invertebrates, limu (algae) and fish in the intertidal environments, noting any spawning or aggregation of species, and noting any juveniles and newly recruited species. (see observation datasheet).

Through these types of observations, one can discover how different the intertidal zone changes between seasons (Kau-summer/Ho'oilo-winter). At sites in the MHI, the limu (Crustose Coralline Algae (CCA) and macoalgae) zone expands during the winter, due to the large waves that are generated by winter storms, and decrease during the calm summer months. This allows other organisms such as 'opihi and ha'uke'uke to expand their habitable zone as well. New recruits for 'opihi and ha'uke'uke were observed during the winter season about 1-2 months after a peak spawning event, but wasn't observed during the summer season. The peak spawning period was determined by conducting a gonad study for both 'opihi and ha'uke'uke. These are just a few examples that demonstrate how both western and traditional knowledge can complement each other to obtain both quantitative and qualitative data.

The scientific research methods include laying belt transects to assess class size, population density, community structure, species range, distribution, and rugosity for all organisms within the intertidal zone. A minimum of 20 'opihi population/ intertidal surveys at each island / atoll will be conducted. Statistical analysis of the data will be analyzed at the Hawai'i Institute of Marine Biology lab. Data analyzed will be useful to local and governmental managers to make effective decisions on managing the resources.

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'Opihi (Limpets, or Cellana exarata, Cellana sandwicensis, and Cellana talcosa) and ha'uke'uke (Helmet urchin, or Colobocentrotus atratus) gonad studies will also be conducted in partnership with researchers at Hawaii Institute of Marine Biology (HIMB) under the research permit application submitted by Dr. Rob Toonen to gain a better understanding of reproductive cycles. Since NWHI 'opihi populations are genetically different than MHI populations, spawning cycles may also be different (Bird et al 2007). Ha'uke'uke help to maintain habitat for 'opihi to live because they graze on the macro-algae that could displace 'opihi populations. The gonad studies would give a better understanding of 'opihi and ha'uke'uke spawning in the NWHI. This involves the extraction of 50 individuals of each species from each island (Mokumanamana, Nihoa, Gardner Pinnacles, French Frigate Shoals); all collections will be conducted through the research permit application submitted by Dr. Rob Toonen at HIMB.. The following measurements will be taken for each 'opihi extracted (shell length, shell width, total weight, meat weight, gonad weight, shell weight, inside shell length, inside shell width and sex). Ha'uke'uke measurements will include diameter, total weight, gonad weight and sex. (see attached 'opihi and ha'uke'uke gonad data sheet).

The research team will work together to apply this integrated monitoring approach. The research team will be comprised of cultural researcher / practitioners, Western research scientists, and managers. To ensure the success of these field studies, the team will conduct appropriate protocol and offer ho'okupu (cultural offerings) to maintain the spiritual integrity of the sites that are visited.

#### c.) This activity would help the Monument by ...

This activity will not only add to the current knowledge of the marine environment in the NWHI, it will help to gain a better understanding of the resources by looking at the resources through a Native Hawaiian cultural lens ensuring a holistic approach to interaction and care. It will also help the monument by continuing to re-establish Native Hawaiian ancestral consciousnes and awareness with regard to the health and condition of the marine resources. Native Hawaiian protocol and methodology is integrated with western scientific protocol and methodology to better understand the status of intertidal marine resources and helps the Monument strengthen its management of cultural resources and ensures the strong participation of Native Hawaiians in the region's long-term protection. By providing opportunities to conduct cultural research, (cultural) researchers will assist in the recovery of important Native Hawaiian marine management practices and support the use of Native Hawaiian traditional ecological knowledge. Additionally, the permitted cultural practitioners and researchers will be key to the development of an eventual cultural access and monitoring plan for the NWHI.

Other information or background: Additionally this project is also supported by the following activities in the Monument Management Plan, (NHCH-2.1, 2.2, 2.3, 2.5, 2.6, 3.4 and NHCI -3.1 and 3.2) all of which call for the identification of Native Hawaiian research priorities and access opportunities.

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### **Section A - Applicant Information**

Section A - Applicant Information
1. Applicant
Name (last, first, middle initial): Tom, Shauna, Kehaunani
Title:
1a. Intended field Principal Investigator (See instructions for more information):
2. Mailing address (street/P.O. box, city, state, country, zip):
Phone:
Fax:
Email:
For students, major professor's name, telephone and email address:
3. Affiliation (institution/agency/organization directly related to the proposed project):

# 4. Additional persons to be covered by permit. List all personnel roles and names (if known at time of application) here (e.g. John Doe, Diver):

A maximum of 12 TBD (will be named in the compliance information sheet) individuals comprised of researchers from Hawaii Institute of Marine Biology (HIMB), cultural researchers / practitioners from the communities of Hana, Kalapana, and Kalaemano, Monument management staff, and non-governmental partners including The Nature Conservancy would conduct work under this permit.

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### **Section B: Project Information**

5a. Project location(s):		Ocean Based	
Nihoa Island		Shallow water	Deep water
Necker Island (Mokumanamana)	□ Land-based	Shallow water	Deep water
☐ French Frigate Shoals	∠ Land-based	Shallow water	Deep water
☐ Gardner Pinnacles		Shallow water	Deep water
☐ Maro Reef			_ •
Laysan Island	☐ Land-based	Shallow water	Deep water
Lisianski Island, Neva Shoal	Land-based	Shallow water	Deep water
Pearl and Hermes Atoll	Land-based	Shallow water	Deep water
Midway Atoll	Land-based	Shallow water	Deep water
Kure Atoll	Land-based	Shallow water	Deep water
Other	_		
NOTE: There is a fee schedule for pe	ople visiting Midway	Atoll National Wildlife	e Refuge via
vessel and aircraft.			Ü
Location Description: Surveys would	d be conducted below	the splash zone within	intertidal areas
on all basaltic islands that contain 'or			
sites beyond the splash zone on all is		· ·	•
•			
5b. Check all applicable regulated	activities proposed to	be conducted in the I	Monument:
Removing, moving, taking, harve			
living or nonliving Monument resour		<i>C</i> , <i>C</i> ,	
Drilling into, dredging, or otherwi	ise altering the submer	ged lands other than by	v anchoring a
vessel; or constructing, placing, or ab			
submerged lands	<i>2</i> ,	, , , , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·
Anchoring a vessel			
Deserting a vessel aground, at and	hor, or adrift		
Discharging or depositing any ma		e Monument	
Touching coral, living or dead			
Possessing fishing gear except wh	en stowed and not ava	ilable for immediate u	se during
passage without interruption through		and to the minimum of the district of	se during
Attracting any living Monument r			
Sustenance fishing (Federal water		vial Preservation Areas	Ecological
Reserves and Special Management A		har i reservation meas	, Leologicai
Subsistence fishing (State waters			
Swimming, snorkeling, or closed		A diving within any Cn	ecial
Preservation Area or Midway Atoll S			CCIAI
Tosor vacion Area of Milaway Atoli S	peciai ivianagement Al	lea	

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#### 6 Purpose/Need/Scope State purpose of proposed activities:

The central purpose of the expedition is to expand and advance traditional Native Hawaiian knowledge in the field of marine conservation and management and continue to bridge the gap between cultural and western research methodologies. The primary objectives of the cultural expedition are to: (1) collect environmental data related to traditional Native Hawaiian marine management; (2) expand the application of traditional Hawaiian environmental monitoring tools and methodologies; (3) increase the knowledge base pertaining to intertidal ecosystems, including 'opihi / ha'uke'uke abundance, health, and reproductive cycles.

7. Answer the Findings below by providing information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Monument:

The Findings are as follows:

a. How can the activity be conducted with adequate safeguards for the cultural, natural and historic resources and ecological integrity of the Monument?

All activities contained in this permit application were permitted over prior years and have demonstrated no impact on Monument cultural, natural and historic resources. All consultations (e.g. Section 7 Endangered Species Act) and compliance requirements would be completed prior to departure. The activities would adhere to all rules and regulations established by the Monument including adherence to all quarantine requirements, wildlife viewing guidelines, and entry/exit notification procedures where applicable.

The intertidal monitoring / 'opihi team consists of Native Hawaiian practitioners / cultural researchers on this voyage who are experienced in proper protocol and will help to ensure the entire group enters Papahānaumokuākea with proper intent and that all resources are treated with respect and care. Native Hawaiian protocols, including oli and mele, will be conducted to reestablish an awareness between people and place. It will also serve to reconnect the Northwestern Hawaiian Islands into the Hawaiian consciousness and worldview. This ceremony/protocol is very important because it establishes a sense of respect and reverence for the environment and all things it encompasses. It also supports a cultural interaction between people (younger siblings) and the islands (older siblings) and prepares participants for that interaction. These protocol and ceremony are necessary to tap into an elevated state of awareness which will support cultural research and participants' openness to "see" properly. The Papahānaumokuākea Native Hawaiian Cultural Working Group will be consulted on this permit application to ensure everything is properly planned and implemented.

b. How will the activity be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument cultural, natural and historic resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects?

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Per 7a above, all activities obtained in this permit application were permitted over prior years and have previously demonstrated no impact on Monument cultural, natural and historic resources. All consultations (e.g. Section 7 ESA) and compliance requirements would be completed prior to departure. All personnel named in this permit are experienced with conducting surveys in the intertidal zone and are aware of the risks associated with working in nearshore areas with high wave action. Activities proposed in this application would have no cumulative effect as the applicant is proposing short (1-2 day) survey days at each island, and no negative effects have resulted from previous years surveys within the NWHI.

In addition, this activity is part of the following Monument Management Plan Action Plans:

- NHCH 2.3: Facilitate cultural field research and cultural education opportunities annually;
- NHCH 2.6: Continue to facilitate Native Hawaiian cultural access;
- NHCH-3.1: Assess Monument cultural resource capacity:
- NHCH-3.2: Increase knowledge base of Native Hawaiian values and cultural information through "in-reach" programs for research managers;
- NHCH-4.2: Develop and implement specific preservation and access plans, as appropriate, to protect cultural sites at Nihoa and Mokumanamana;
- NHCH-5.3: Integrate Native Hawaiian values and cultural information into the Monument permittee education and outreach program;

c. Is there a practicable alternative to conducting the activity within the Monument? If not, explain why your activities must be conducted in the Monument.

There is no practicable alternative to conducting the activity within the Monument. There is no other place within the Hawaiian archipelago that can serve as a baseline of abundance for local community-based marine managers due to its remote locale and legal protection status. Because the Northwestern Hawaiian islands are remotely managed, this area serves as an optimal measure to determine expected abundances-as these cultural researchers are engaged in community-based near shore marine management in the main Hawaiian islands. A field study was attempted on Kaho'olawe, however, due to fishing pressures and run-off, the study site was determined to be sub-optimal.

d. How does the end value of the activity outweigh its adverse impacts on Monument cultural, natural and historic resources, qualities, and ecological integrity?

The end value of the activity outweighs any adverse impacts by safeguarding against the loss of opportunity to expand Native Hawaiian knowledge relating to the NWHI. There is a great need to recover traditional Native Hawaiian marine ecosystem management practices, and as such, the Monument provides an unparalled venue to accomplish this.

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e. Explain how the duration of the activity is no longer than necessary to achieve its stated purpose.

Twelve days is the shortest possible duration to conduct intertidal surveys. Twelve days would allow 1-2 days at each island/atoll to conduct surveys and adequate transit time for the vessel.

f. Provide information demonstrating that you are qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.

The applicant, Shauna Kehaunani Tom is qualified to conduct both traditional and scientific surveys because of her knowledge using both methods in prior research projects. Her knowledge of ocean conditions and environments started at a young age, as she would go to the beach to fish, surf and swim. She continued this connection with the ocean through high school and college where she learned more about Hawaiian protocol and culture along with marine biology. In the past three years she has been a part of larger group that aims to conduct integrated monitoring using traditional knowledge and western science to explore land and ocean environments. Her recent studies as a master's student looking at the cultural use and ecology of 'opihi densities at Kalaupapa National Historical Park trained her to conduct intertidal and near shore surveys. Her fellowship with the National Park Service not only gave her hands on experience in research and monitoring, she also learned aspects of fisheries management. She has extensive knowledge about traditional knowledge of ocean conditions from the relationships she established with many respected elders that taught her about seasonal cycles and sustainable resource management. In addition to these relationships, Kehau has spent the last two years looking at two systems on the MHI of Hawaii conducting integrated monitoring and assessment. These past two years is the foundation for Kehau to know her environment as her kupuna have so she can make decisions that relate to these places today: stress on time and place.

The cultural researchers that will perform various research activities are all trained in traditional near-shore marine management, fishery management, traditional weather observations and working in dangerous near-shore, high wave action areas.

g. Provide information demonstrating that you have adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.

The proposed field activities are funded in full by NOAA, Papahānaumokuākea Marine National Monument. The data workup for all the information collected through this project would also be supported by the Monument and the Hawaii Institute of Marine Biology.

h. Explain how your methods and procedures are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument cultural, natural and historic resources, qualities, and ecological integrity.

The methods and procedures employed are widely accepted methods for acquiring data in the marine environment by Native Hawaiian marine practitioners and research scientists. The

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proposed methodology would not require specialized equipment and would also take into full account the fragility of the Monument's resources.

i. Has your vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?

Once a ship is secured, the applicant will ensure it meets the VMS type-approval requirement as stated in Monument regulations.

j. Demonstrate that there are no other factors that would make the issuance of a permit for the activity inappropriate.

All permits required for access and conducting cultural observations of the marine environment will be obtained. Also, several members from the Native Hawaiian cultural working group have been consulted regarding the activities to be permitted under this application.

#### ADDITIONAL FINDINGS FOR PROPOSED NATIVE HAWAIIAN PRACTICES

k. Explain how the activity is non-commercial and will not involve the sale of any organism or material collected.

The activity is non-commercial. The end-value of the activity is informational and is intended to provide local and governmental managers the information critical to the conservation of these cultural resources.

l. Explain how the purpose and intent of the activity is appropriate and deemed necessary by traditional standards in the Native Hawaiian culture (pono), and demonstrate an understanding of, and background in, the traditional practice and its associated values and protocols.

The purpose and intent of the proposed activity is appropriate and pono by traditional standards in the Native Hawaiian culture in that the expedition is centered on enhancing traditional marine resource management skills through careful observation. The ability to increase or maintain productivity of a particular kai (fishery) is integral to maintaining traditional Native Hawaiian knowledge and marine management systems; and is therefore consistent with pono marine stewardship tenets.

m. Explain how the activity benefits the resources of the Northwestern Hawaiian Islands and the Native Hawaiian community.

The data collected from these field studies will better enable these cultural researchers / practitioners to understand the biological, spiritual and cultural connections bewteen the NWHI and the main Hawaiian islands. In doing so, researchers will be better equipped to manage their areas in the main Hawaiian islands from which the Northwestern Hawaiian Islands will ultimately benefit.

Papahānaumokuākea Marine National Monument Permit Application — Native Hawaiian Practices OMB Control # 0648-0548 Page 11 of 15

n. Explain how the activity supports or advances the perpetuation of traditional knowledge and ancestral connections of Native Hawaiians to the Northwestern Hawaiian Islands.

The group of cultural researcher / practitioners being selected for this expedition posses intricate knowledge of traditional Native Hawaiian marine management practices in the near shore fishery area within their own ahupua'a. Of equal importance, knowledge gained will be utilized to inform local marine management and conservation education within their home communities. Each practitioner will reflect upon traditional concepts like 'aina momona(bountiful lands), ho'omalu(regulated activities) and kapu(prohibited activities) which are fundamental in traditional Native Hawaiian marine management.

o. Will all Monument resources harvested in the Monument be consumed in the Monument? If not, explain why not.

While no Monument resources will be harvested under this permit, 'opihi and ha'uke'uke will be collected under Dr. Rob Toonen's permit application and cultural researchers will (a) participate as part of the research team under Dr. Rob Toonen's research permit application and (b) utilize the information gathered from the research activities under Dr. Toonen's permit application to complement their own cultural research on spawning cycles.

#### 8. Procedures/Methods:

The cultural research team would make visual assessments of intertidal areas where 'opihi and ha'uke'uke are located. The research team would record substrate type, limu type/density, crustose/turf/macro algae proportions, other species proportions/ratio, clumping of 'opihi, ha'uke'uke, and other intertidal species, presence of natural predators, freshwater input, etc. The team would take wet/dry notes and use digital cameras to record observations. At the end of each day, a discussion will be held to share observations and relationships made with the group. One person will be designated and write all the observations made by the group on one data sheet in order to facillitate the analysis process while observations are still fresh and can be clarified. To complete all of these activities, cultural practitioner / researchers would require access to nearshore areas (below the splash zone) that contain 'opihi habitat (e.g. intertidal zone at Mokumanamana). Cultural practitioners / researchers would adhere to all Monument requirements while undertaking this project.

In addition, under the HIMB reserch permit application submitted by Dr. Rob Toonen, Gonad studies would include, harvesting 50 individuals of each species and disecting them to obtain a gonad index to determine peak spawning times. Shell and animal measurements will also be noted for each individual collected for the gonad study. Spawning times in 'opihi and ha'uke'uke can be connected to certain lunar phases and lunar seasons which is very important to understand from a cultural standpoint because it is a prized species harvested by Native Hawaiians and others alike. 'Opihi is a food source, the shells are used for tools and there are numerous traditional stories told about this species. Therefore the understanding of reproductive cycles in the NWHI will contribute to the knowledge of intertidal organisms to make effective management decisions. Marine managers in the MHI will also benefit by the collection of this knowledge, to understand how populations not affected by humans and harvesting are doing.

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This will allow them to make decisions about the management of these organisms in places that are open to harvesters. Conducting both the 'opihi / intertidal population surveys and gonad studies will give insight on how they recover after a harvesting event. This will give managers a sense of how much harvesting is too much and what affects densites and populations.

NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding, as a customized application will be needed. For more information, contact the Monument office on the first page of this application.

9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):

No specimens will be collected under this permit application; however specimens will be collected under the research permit application submitted by Dr. Rob Toonen at HIMB and will be shared with cultural researcher / practitioners for studies on spawning, reproduction and correlations with weather (especially lunar cycles) in the field. These specimens would be housed at HIMB and the Monument Management Board would be contacted in writing if any cultural or western researchers would want to use the specimens after the field portion of this year's project is completed. The Hawaii Institute of Marine Biology has facilities appropriate to store all collections and has a long standing partnership with the NOAA / Office of National Marine Sanctuaries - Monument.

# & size of specimens:
n/a Collection location:
☐ Whole Organism ☐ Partial Organism
9b. What will be done with the specimens after the project has ended?
9c. Will the organisms be kept alive after collection?   Yes   No
• General site/location for collections: n/a
• Is it an open or closed system?
• Is there an outfall?  Yes  No
• Will these organisms be housed with other organisms? If so, what are the other organisms?

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• Will organisms be released? No

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## 10. If applicable, how will the collected samples or specimens be transported out of the Monument?

# 11. Describe any fixed or semi-permanent structures or installations, or cultural offerings you plan to leave in the Monument:

Offerings of pa'akai(salt) and wai (water) may remain in the Monument.

- 12. List all specialized gear and materials to be used in the proposed activities: Snorkeling gear, transect line, data sheets, etc.
- 13. List all Hazardous Materials you propose to take to and use within the Monument: none

# 14. Describe collaborative activities to share samples, cultural research and/or knowledge gained in the Monument:

This permit application has been submitted in conjunction with a permit application from Dr. Rob Toonen of the Hawaii Institute of Marine Biology. All samples and methodologies discussed in this permit application are directly related to Dr. Toonen's permit application. This project will continue to bridge the gap between cultural and western research.

In addition, cultural researchers will present preliminary findings to their respective communities (Hana, Kalapana, etc.) and marine resource maangers under this permit will continue to inform and update the public (e.g. at Reserve Advisory Council meetings) and the Native Hawaiian Cultural Working Group on all findings.

15a.	Will you produce an	y publications.	, educational materials	or other	deliverables?
$\boxtimes$	Ves No	-			

## 15b. Provide a time line for write-up and publication of information or production of materials:

A summary and annual report from this cruise will be provided to Monument management upon conclusion of the cruise.

16. If applicable, list all Applicant's publications directly related to the proposed project: not applicable

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With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct. I agree that the Co-Trustees may post this application in its entirety on the Internet. I understand that the Co-Trustees will consider deleting all information that I have identified as "confidential" prior to posting the application.

Signature	Date	

# SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT OFFICE BELOW:

Papahānaumokuākea Marine National Monument Permit Coordinator 6600 Kalaniana'ole Hwy. # 300 Honolulu, HI 96825 FAX: (808) 397-2662

#### DID YOU INCLUDE THESE?

Applicant CV/Resume/Biography
Intended field Principal Investigator CV/Resume/Biography
Electronic and Hard Copy of Application with Signature
Statement of information you wish to be kept confidential
Material Safety Data Sheets for Hazardous Materials

Papahānaumokuākea Marine National Monument Compliance Information Sheet OMB Control # 0648-0548 Page 1 of 4

### Papahānaumokuākea Marine National Monument Compliance Information Sheet

1. Updated list of personnel to be covered by permit. List all personnel names and their roles here (e.g. John Doe, Diver; Jane Doe, Field Technician, Jerry Doe, Medical Assistant):

Hoku Johnson (Coordinator), Chris Bird (Researcher), Kehau Tom (Researcher), Patrick Springer (Medical Assistant), Emily Fielding (Researcher), Illy Igleasias (Researcher), Jennifer Smith (Researcher), TBA Phycologist, TBA Hana, TBA Kalapana, Pelika Bertlemann (Researcher – alternate)

- 2. Specific Site Location(s): (Attach copies of specific collection locations): Nihoa Island, Necker Island (Mokumanamana), French Frigate Shoals, Gardner Pinnacles
- 3. Other permits (list and attach documentation of all other related Federal or State permits):

This project will be conducted alongside Research Permit Number PMNM-2011-041 (PI Toonen, Field PI Bird)

3a. For each of the permits listed, identify any permit violations or any permit that was suspended, amended, modified or revoked for cause. Explain the circumstances surrounding the violation or permit suspension, amendment, modification or revocation.

None

4. Funding sources (Attach copies of your budget, specific to proposed activities under this permit and include funding sources. See instructions for more information):

This trip is fully supported by NOAA / NOS / Office of National Marine Sanctuaries, Papahānaumokuākea Marine National Monument and the Hawaii Institute of Marine Biology.

#### 5. Time frame:

Activity start: 25 September 2011 Activity completion: Ongoing

Dates actively inside the Monument:

From: 25 September 2011

Papahānaumokuākea Marine National Monument Compliance Information Sheet OMB Control # 0648-0548 Page 2 of 4 To: 25 October 2011 Describe any limiting factors in declaring specific dates of the proposed activity at the time of application: Personnel schedule in the Monument: A complete itinerary is forthcoming. The project is aiming to spend 1-3 days at each of the aforementioned sites (Nihoa, Mokumanamana, French Frigate Shoals and Gardner Pinnacles) depending on weather conditions. 6. Indicate (with attached documentation) what insurance policies, bonding coverage, and/or financial resources are in place to pay for or reimburse the Monument trustees for the necessary search and rescue, evacuation, and/or removal of any or all persons covered by the permit from the Monument: This project is fully supported by the Monument. The Federal Government is selfinsured. In addition the cruise participants will carry emergency evacuation insurance (e.g. DAN insurance or something comparable). 7. Check the appropriate box to indicate how personnel will enter the Monument: ⊠ Vessel Aircraft Provide Vessel and Aircraft information: Searcher 8. The certifications/inspections (below) must be completed prior to departure for vessels (and associated tenders) entering the Monument. Fill in scheduled date (attach documentation): All certifications will be completed prior to entry. A hull, tender, ballast water and gear inspection will be completed two weeks prior to sailing. Rodent free, Date: Tender vessel, Date: Ballast water, Date: Gear/equipment, Date:

Hull inspection, Date:

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# 9. Vessel information (NOTE: if you are traveling aboard a National Oceanic and Atmospheric Administration vessel, skip this question):

Vessel name: SEARCHER

Vessel owner: The Medical Foundation for the Study of the Environment

Captain's name: Jonathan Littenberg

IMO#:192

Vessel ID#: U.S. Coast Guard 1103056

Flag: U.S.

Vessel type: Steel Hull Call sign: WDA 6100 Embarkation port: Honolulu

Last port vessel will have been at prior to this embarkation: Honolulu

Length: LOA 96 FT / Registered 78.1 FT

Gross tonnage: 197

Total ballast water capacity volume (m3): N/A Total number of ballast water tanks on ship: N/A

Total fuel capacity: 9,600 Gallons Total number of fuel tanks on ship: 6 Marine Sanitation Device: Yes

Type: II

Explain in detail how you will comply with the regulations regarding discharge in the Monument. Describe in detail. If applicable, attach schematics of the vessel's discharge and treatment systems:

All materials and fluids shall be properly stored in holding tanks while the vessel is in Monument waters and will be properly disposed of upon our exit from the Monument.

Other fuel/hazardous materials to be carried on board and amounts:

Approximately 30 gallons of unleaded fuel in jerry cans for use in the skiffs.

Provide proof of a National Oceanic and Atmospheric Administration (NOAA) Office of Law Enforcement-approved Vessel Monitoring System (VMS). Provide the name and contact information of the contractor responsible for installing the VMS system. Also describe VMS unit name and type:

Vessel Monitoring System – Thrane & Thrane Sailor TT-3606XP

VMS Email: 436998398@c12.stratoemobile.net

Inmarsat ID#: 4TT072E62B15

Contact: Jonathan Littenberg (808.225.8982) or Barbara Littenberg (808.221.6156)

Papahānaumokuākea Marine National Monument Compliance Information Sheet OMB Control # 0648-0548 Page 4 of 4

#### 10. Tender information:

On what workboats (tenders) will personnel, gear and materials be transported within the Monument? List the number of tenders/skiffs aboard and specific types of motors:

One 16-foot RHIB Zodiac with Yamaha 4 stroke engine or one new 16 foot inflatable Avon with Yamaha 4-stroke tiller engine.

### **Additional Information for Land Based Operations**

11. Proposed movement of personnel, gear, materials, and, if applicable, samples:
12. Room and board requirements on island:
13. Work space needs:
DID YOU INCLUDE THESE?
Map(s) or GPS point(s) of Project Location(s), if applicable
Funding Proposal(s)
Funding and Award Documentation, if already received
Documentation of Insurance, if already received
Documentation of Inspections
Documentation of all required Federal and State Permits or applications for permits

NEIL ABERCROMBIE





#### STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES **DIVISION OF AQUATIC RESOURCES** 1151 PUNCHBOWL STREET, ROOM 330 HONOLULU, HAWAII 96813

August 12, 2011

TO: Division of Aquatic Resources File

THROUGH: William J. Aila, Jr., Chairperson

FROM: Francis Oishi

Division of Aquatic Resources

#### SUBJECT:

DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200 HAR, FOR PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT NATIVE HAWAIIAN PRACTICES PERMIT TO SHAUNA KEHAUNANI TOM, FRIENDS OF PAPAHĀNAUMOKUĀKEA, FOR ACCESS TO STATE WATERS TO USE TRADITIONAL ECOLOGICAL KNOWLEDGE TO EXAMINE INTERTIDAL ECOSYSTEMS UNDER PERMIT PMNM-2011-040

The following permitted activities are found to be exempted from preparation of an environmental assessment under the authority of Chapter 343, HRS and Chapter 11-200, HAR:

#### **Project Title:**

Papahānaumokuākea Marine National Monument Native Hawaiian Practices Permit to Shauna Kehaunani Tom, Friends of Papahānaumokuākea, for Access to State Waters to Use Traditional Ecological Knowledge to Examine Intertidal Ecosystems.

Permit Number: PMNM-2011-040

#### Project Description:

The Native Hawaiian practices permit application, as described below, would allow entry and activities to occur in Papahānaumokuākea Marine National Monument (Monument), including the NWHI State waters from September 1, 2011 through November 30, 2011.

The Applicant proposes to to examine the basic ecology of 'opihi populations and intertidal ecosystems within the NWHI by making keen observations of the environment and interactions by understanding connections with atmospheric and seasonal cycles from a Native Hawaiian perspective. This would include using all senses to note activities in the sky, land, and ocean.

**GUY KAULUKUKUI** WILLIAM M. TAM DEPUTY DIRECTOR - WATER

WILLIAM J. AILA, JR. CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

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The applicant would work alongside and collaborate with western researchers requesting access under a separate research permit application by Dr. Rob Toonen of the Hawaii Institute of Marine Biology.

The proposed activities are in direct support of the Monument Management Plan's priority management need 3.1 – Understanding and Interpreting the NWHI (through action plan 3.1.2 – Native Hawaiian Culture and History). This action plan calls for the conduct, support, and facilitation of Native Hawaiian cultural access and research of the NWHI. It specifically notes support for complementary Western science and traditional knowledge investigations and management. Activities to support the integration of traditional knowledge and western science, such as those being proposed, are also addressed in the Monument Management Plan Environmental Assessment (December 2008) which resulted in a FONSI. This EA notes that "identifying research needs, supporting Native Hawaiian cultural access, and incorporating Native Hawaiian traditional knowledge and associated practices into Monument management" could have beneficial effects on Monument resources (PMNM MMP Vol 2, p.192).

#### **Consulted Parties:**

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since June 10th, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

#### **Exemption Determination:**

After reviewing HAR § 11-200-(8), including the criteria used to determine significance under HAR § 11-200-12, DLNR has concluded that the activities under this permit would have minimal or no significant effect on the environment and that issuance of the permit is categorically exempt from the requirement to prepare an environmental assessment based on the following analysis:

- 1. All activities associated with this permit, including the use of traditional ecological knowledge in combination with western science methodologies to examine intertidal ecosystems, have been evaluated as a single action. As a preliminary matter, multiple or phased actions, such as when a group of actions are part of a larger undertaking, or when an individual project is precedent to or represents a commitment to a larger project, must be grouped together and evaluated as a single action. HAR § 11-200-7. Since this permit involves an activity that is both part of a larger undertaking and precedent to a later planned activity, i.e. the continuation of nearshore traditional and western based ecological monitoring and the associated gonad and genetic studies, the categorical exemption determination here will treat all planned activities as a single action.
- 2. The Exemption Class for Basic Data Collection with no Serious or Major Environmental Disturbance Appears to Apply. Chapter 343, HRS, and section 11-200-8, HAR, provide for a list of classes of actions exempt from environmental assessment requirements. HAR §11-200-8.A.5. specifically exempts the class of actions which involve "basic data collection, research, experimental management, and resource evaluation activities, which do not result in a serious or

major disturbance to an environmental resource." This exemption class has been interpreted to include natural resource observations, such as those being proposed.

The proposed sky, land, and ocean evaluation activities here appear to fall squarely under the exemption class #5, exempt item #4 as described under the former Fish and Game Division exemption list published in January 19, 1976. The Native Hawaiian practices of observing and documenting natural resource states are considered data collection. As discussed below, no significant disturbance to any environmental resource is anticipated through the act of observing the Monument resources. Thus, so long as the below considerations are met, an exemption class should include the action now contemplated.

3. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Potentially Particularly Sensitive Environment Will Not be Significant. Even where a categorical exemption appears to include a proposed action, the action cannot be declared exempt if "the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment." HAR § 11-200-8.B. To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. HAR § 11-200-12. Examples of actions which commonly have a significant effect on the environment are listed under HAR § 11-200-12.

This would be the continuation, and third year, of a project which involves the evaluation of intertidal communities within the context of their neighboring ecosystems from a Native Hawaiian perspective. Activities directly under this permit are strictly observational and involve no collections. The prior permits that have involved observational activities have had no deleterious effects on Monument resources.

Because this project is being carried out in conjunction with a research permit and involves western ecological methodologies and collections, the cumulative impacts of those activities will also be considered. Past projects which have included similar collections and techniques have had no adverse impact. Similar nearshore biodiversity monitoring activities have been permitted and performed within the NWHI. In addition, lethal and non lethal genetic tissue sampling has also been undertaken in the marine environment within PMNM. The species targeted for collection in the associated project are ones identified as being abundant and common on every island surveyed to date, for which the estimated population sizes are so large that collection of 50 individuals per island would have no detectable impact. Dr. Toonen, the Applicant for the associated research permit, notes that no more than 1% of the population at any site would be sampled. With this in mind, significant cumulative impacts are not anticipated as a result of this activity, and numerous safeguards further ensure that the potentially sensitive environment of the project area will not be significantly affected.

All activities will be conducted in a manner compatible with the management direction of the Monument Proclamation in that the activities do not diminish monument resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects. The joint permit review process did not reveal any anticipated indirect or cumulative impacts, nor did it raise any cultural concerns, that would occur as a result of these activities.

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The activities would be conducted from the NOAA contracted vessel, R/V Searcher (PMNM-2011-001), during late September and October 2011. There is one other proposed activity that is anticipated to take place on this vessel pending approval of the permit application.

The other proposed activity, Toonen (PMNM-2011-041) would also take place in the intertidal area of these islands at the same time. Toonen proposes a western, scientific approach to studying this habitat and its associated organisms. The two proposed activities while differing in their approach to understanding this habitat were co-designed with the same goal of adding a greater total knowledge base for this region. As such, there would be no duplicate sampling of the resources nor organisms since the proposals were cohesively designed together.

The culmination of these permits, occurring in the southern half of the Monument over a 2-week period, is not anticipated to have significant cumulative impacts. The NOAA Ship OSCAR ELTON SETTE (PMNM-2011-008) may also be in the Monument during this time frame facilitating needs of the monk seal camps under the management permit (PMNM-2011-001).

Since no significant cumulative impacts or significant impacts with respect to any particularly sensitive aspect of the project area are anticipated, the categorical exemptions identified above should remain applicable.

4. Overall Impacts will Probably be Minimal and Insignificant. Any foreseeable impacts from the proposed activity will probably be minimal, and further mitigated by general and specific conditions attached to the permit. Specifically, all Native Hawaiian practices activities covered by this permit will be carried out with strict safeguards for the natural, historic, and cultural resources of the Monument as required by Presidential Proclamation 8031, other applicable law and agency policies and standard operating procedures.

<u>Conclusion</u>. Upon consideration of the permit to be approved by the Board of Land and Natural Resources, the potential effects of the above listed project as provided by Chapter 343, HRS and Chapter 11-200 HAR, have been determined to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.

William J. Aila, Jr.	Date
Chairperson, Board of Land and Natural Resources	